CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

522

Indian Printed Textiles

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Produced by MARG PUBLICATIONS

34-38, Bank Street, Fort, Bombay 1.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

INDIAN PRINTED TEXTILES

ALL INDIA HANDICRAFTS BOARD
Ministry of Commerce and Industry
Government of India

522
23,560

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

An old Kalamkari cloth from Pallakolu, S. India. The floral design is shaded and gold is used to outline the pattern producing a rich effect similar to "Kinkhab."
(Courtesy: Calico Museum)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

An Introduction to "Indian Printed Textiles"

Before we investigate the background of printed fabrics in India, it would be of value to determine what is meant by the term printed textiles. For the purpose of this brochure we shall limit the enquiry to those processes that are dependent on skill of hand. We shall exclude, therefore, all mechanical processes where the machine is utilised to produce a given pattern.

By printed textiles is meant all fabrics on which a pattern is produced subsequent to the weaving of the cloth, by the application of dye-stuff or pigment to the surface of the fabric. This can be done in various ways.

(*a*) By the direct or application process. This implies the use of the wooden block or silk screen directly on the fabric. This is commonly known as the block-printing and the screen printing process.

(*b*) By the resist or indigo process. This implies covering or impregnating certain portions of the cloth which are intended to be kept in the background colour, with wax, clay, gum, resin or other resist, so that when the cloth is subsequently dyed, the colour does not penetrate the portions which have been previously impregnated with the resist. This produces the desired pattern. Block-printing may be subsequently carried out, after the cloth has been dyed and the resist removed, onto the portions of the cloth, which have retained their original colour. The resist substance may be applied by brush or Kalam, by block or by hand.

(*c*) By the mordant, madder, alizirine or modern discharge process. In the mordant or alizirine process the cloth is prepared with various mordants prior to the use of the dye. When the cloth is then immersed in a dye bath, a chemical reaction of the dye on the mordant produces different colours on the cloth. Only those portions which have been prepared take the

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

dye. Various shades are produced by variable use of the mordant. The colours that emerge have great depth and brilliance. The mordant and the dye can be applied both by brush or by block.

In the modern discharge process the cloth is dyed in the desired background colour. The pattern is then printed on with chemicals, which results after further treatment, in the removal of the background colour from those portions where chemicals have been so applied. The discharged parts of the design can then be further processed.

(*d*) By the application of a thick pigment or "roghan", (which is made by mixing a yellow powdered colour with castor oil and then heating the mixture) to the fabric, thereby producing patterns which appear to be encrusted on the fabric. When gold powder is used in the pigment it is known as tinsel printing.

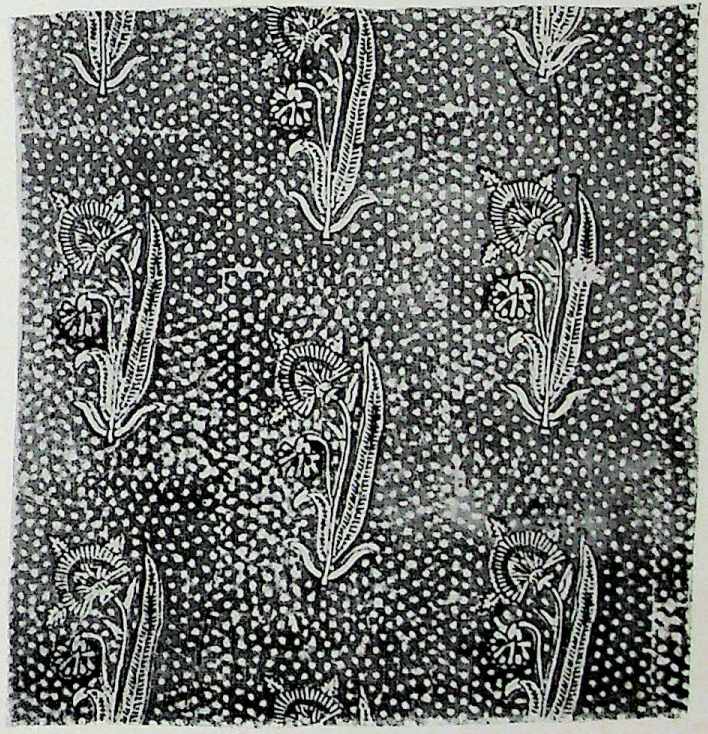
All these types of printing are practised in India. Direct or block and screen printing are the processes mainly in use in cities. Silk, rayon and cotton cloth are used as the basic material. Discharge printing on silk is limited to a few craftsmen in the larger cities.

The indigo, alizirine or madder and "roghan" processes are employed by "chipas" (printers) in villages and towns where printing is a traditional craft, with a long and ancient history. The printers or chippas are hereditary craftsmen belonging both to the Hindu and Muslim communities. Most printing centres are concentrated round rivers, tanks or wells, the waters of which are said to contain certain chemicals which at one time, when vegetable dyes were in use, were essential to the production of the deepest and richest colours. It is only in the last hundred years, with the discovery of alizirine, the colouring substance of madder, and of synthetic indigo as coal tar bye-products that the use of vegetable dyes have practically died out. The old processes are still largely followed, but the dyes in use are chemical bye-products.

The art of using pigments to ornament fabrics has an ancient origin. The discovery of a fragment of a madder-dyed fabric at Mohenjo-daro, sticking to a silver vase, would lead us to believe that the mordant process of dyeing cloth was known in India five thousand years ago.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

A fragment of resist dyed cloth discovered by Aurel Stein in Central Asia, 8th Century.
(Courtesy: Archaeological Department, Govt. of India)



Fragment of Madder dyed textile found in an ancient tomb in Egypt. 17th Century. A block has been used to outline the design.
(Courtesy: Victoria & Albert Museum)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

A study of the origin and development of printed textiles is rendered extremely difficult by the fact that no specimens of very early printed textiles have survived in this country. The earliest specimen of Indian resist-dyed cloth dates back to the 8th century. It is a fragment of resist-dyed cotton cloth, with a floral motif discovered by Aural Stein in Central Asia. Fragments of block-printed silk have also been found by Stein at some of the Central Asian cities. Innumerable fragments of resist-dyed cloths have been discovered from tombs at Fostat in Egypt. The earliest specimens date back to the 12th century. An analysis of the indigo dye and the treatment of decorative motifs in these Fostat fabrics has led to the belief that the origin of these resist cloths was Gujerat.[1] A study of these fragments is fascinating, revealing as it does a highly developed sense of colour and design. Many of the motifs found on the Fostat cloths are identical with similar motifs in use to-day. When we compare the Fostat fragments with the costumes of the same period worn by men and women, as revealed in the Jain miniature paintings of Gujerat, we find the same amazingly rich treatment of design and a unique arrangement of the design on the cloth. Dr. Moti Chandra in his book on Jain Painting has dealt in some detail on the varied treatment of designs on the cloths as shown in these Jain miniatures.[2] A similar study of designs found on the costumes worn by the Gods and Goddesses in the mural paintings of South Indian temples and the "pats" and illuminated manuscripts of Orissa would be invaluable.

If we examine the wall paintings of Ajanta, we find a great richness and variety of design on the cloths worn both by men and women. The favourite colour of these cloths is blue, indicating knowledge of the indigo dyeing process. Some cloths have diagonal stripes. In places these stripes have merging colours, soft and dark tones exactly similar to the effects produced by the resist-dye technique. In an illustration of the Mahajanak Jataka from Cave I, the chowri bearer has an upper garment decorated with the "hamsa" motif—similar motifs have been found both in the Fostat specimens and in the costumes detailed by Dr. Moti Chandra.

The sources, however, most often quoted by writers on Indian Printed Textiles are the many foreign travellers who have visited this country from the 1st century onwards and who have left vivid records of their travels.

Megasthenes, in the 4th century, writing of the costumes worn by the Indians says: "Their robes are worked in gold,

1. Les Toiles Imprimees De Fostat Et L'Hindustan R. Pfester. Paris Ed. Edition D'Art et D'histoire 1938.
2. Jain Miniature Paintings from Western India by Dr. Moti Chandra (Published by Sarabhai Manilal Nawab).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

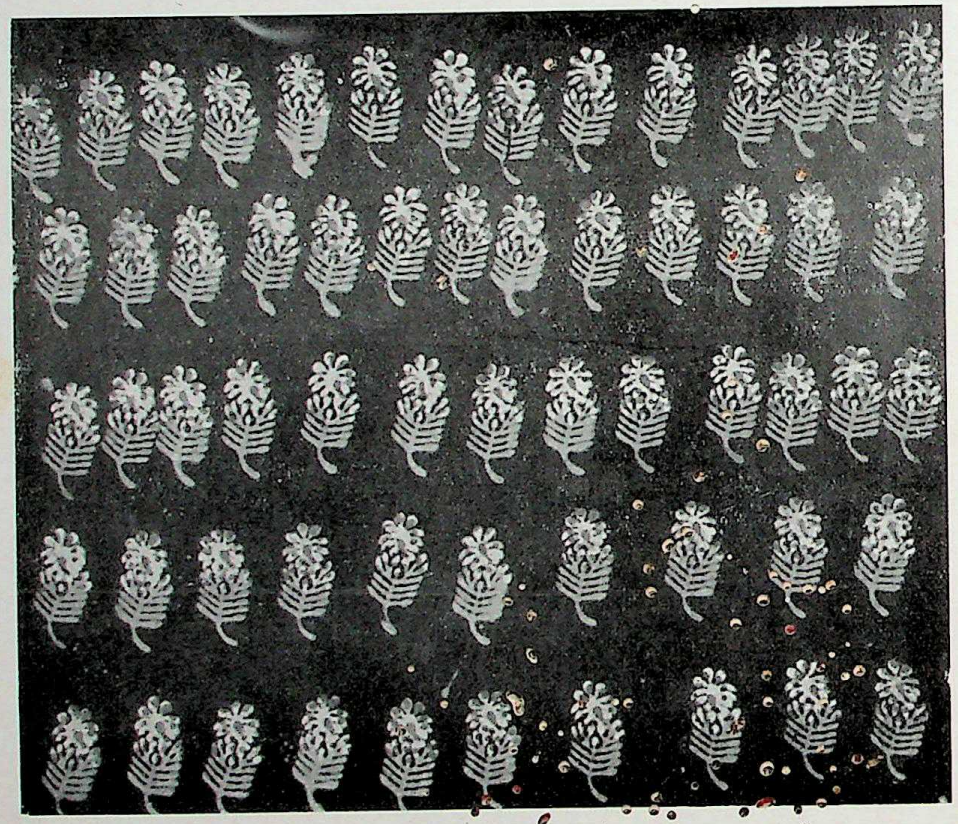
Seven royal geese surrounding a lotus. A design inspired by a resist dyed fragment found at Fostat Egypt. A Bombay discharge print on raw silk.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

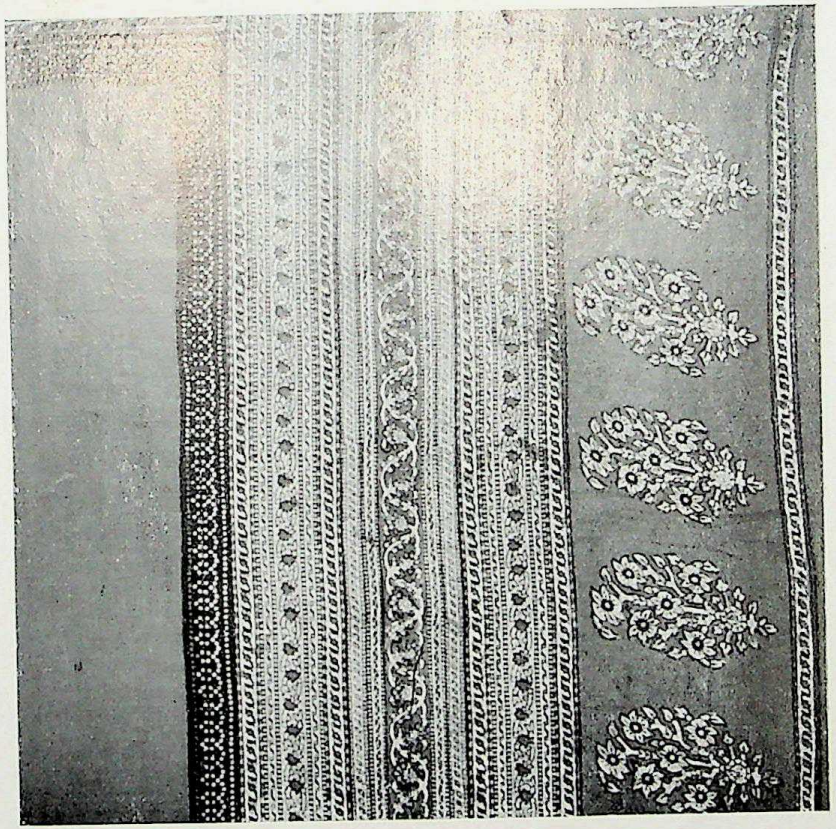
ornamented with precious stones; they wear flowered garments made of the finest muslin." Bernier speaking of the tents used by the Moghul Emperors says: "The outside was red and the inside was lined with those chittis or cloths painted by a pencil of Masulipatam, purposely wrought and contrived with such vivid colours and flowers so naturally drawn, of a hundred several fashions and shapes, that one would have said it was a hanging parterre." But most of the descriptions left by these travellers portray the manners and customs and garments of the aristocracy or at best the costumes worn in cities. There is no record left to us by any of the great travellers of the garments worn by the village people, men and women unconnected with the sophisticated and ever changing fashions of the court. And it is only a study of the costumes and patterned cloths of these simple people, rooted as they are in an unbroken tradition, that will reveal the history of decorative motifs and the basic techniques of resist-dyed cloths. That tradition is unbroken today. In some of the more remote villages of Gujerat and Rajputana we find dyed cloths ornamented with decorative motifs and colour harmonies which must link those fabrics with the earliest attempts of man to decorate his garments. Here we no longer have to trace decorative motifs horizontally back to their source: here the descent is vertical, cutting through thousand years of history.

The great colour belt in India which is identical with the great printing belt extends from the interior of Sindh through the deserts of Cutch, Kathiawar and Rajputana to the borders of Gujerat. It is as if the fierce sun and bare bleak stretches of sand have demanded compensation in the deep brilliant colours worn by the women of these areas. Colours appear here to be roasted and matured by the sun. They form a vital part of the background dictated by urges inherent in the environment and the character of the people who live here. As we go further South, colours lose their brilliance; they become darker and more subdued till at last they seem to quench themselves in the lush vegetation of the backwaters of Malabar. Practically the whole of the vast colour belt is studded with printing centres, with a tradition of resist-dyeing that streches back to a thousand years. In some areas practically every village has its own variation of design and technique.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh



An indigo dyed village cloth from Udaipur. The background is a deep blue-black and the buti is in pale gold white and red.



Palao of an alizirine dyed Gujerat sari produced in Ahmedabad.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Isolated centres of printing are known to have sprung up in the Western U.P. and South India. It was in these southern centres of printing that the craft of the chhipa found richest expression. Taking for inspiration the tradition of mural painting on temples, slowly being revealed at Conjeevaram, Tanjore, Cochin and Padmanabhapur, the great printing centres of Masulipatam, Pallakolu, Kalahasti, Negapatam, Salem, Madura and Tanjore produced Kalamkari cloths that are unsurpassed in vigour of design and freshness and richness of colour. These painted cloths were really an extension of the mural technique. They, like the fresco paintings, illustrated stories from the puranic legends and from the *Ramayana* and the *Mahabharata*. The myths were pictured in several complete units which were then linked together to reveal the story.

A study of available material establishes two main trends in the printing tradition. Arising as they must have done from a common field, from the urge in man to decorate the garments he wore, and based on a common technique, the bifurcation must have arisen early in the history of printed fabrics. The flowered muslins worked with gold, described by Megasthenes, is a far cry from the resist cloths found at Fostat. As the gulf between the ruler and his court and his subjects widened, this deviation gathered strength. It was only however with the advent of craftsmen from Persia in the train of the Moghul Emperors, saturated with the decorative symbology of the famous Isphahan chintzes and the brocades and carpets of their country, that the demarcation between the two trends became firmly established. These two streams of craftsmanship may be classified as the earth tradition and the mosaic and inlay tradition.

I have already mentioned the great colour belt stretching from Sindh to the southern borders of Gujerat. The northern area of this tract was also the great pottery belt stretching back in time to the ancient cities of Mohenjo-daro and Harappa with their storehouse of painted red and grey-ware pottery. The resemblance between the designs found on early specimens of resist-dyed fabrics traced back to these areas, the cloths worn today by women in the interior villages in this belt and the painted designs on pottery found at Harappa, Kuli and other prehistoric sites, is striking. I have already mentioned the discovery of a fragment of madder-dyed cloth at Mohenjo-daro;

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Fragments of an old Kalamkari temple cloth from Pallakolu, S. India.
(*Courtesy: Madras Museum; Photograph: P. V. Pathy*)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

from ancient sites in the Quetta region have come pots painted with designs copied from Sassasian fabrics of the 6th and 7th centuries A.D., indicating the use of common decorative motifs between dyed cloths and pottery.

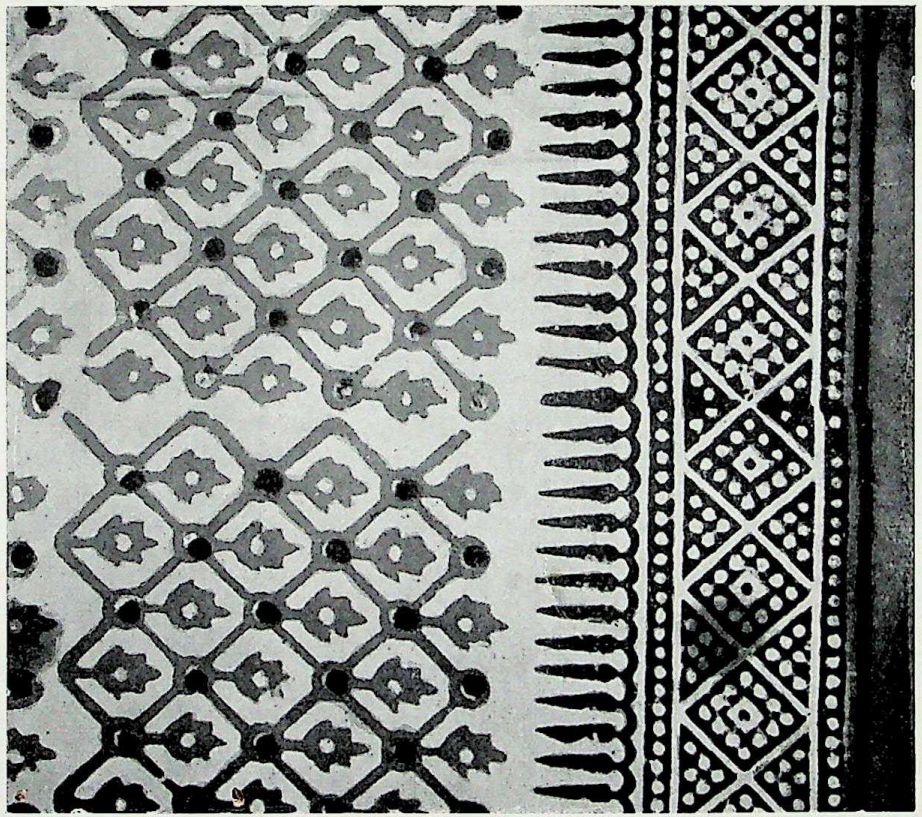
In the resist-dyed cloths there is the use of the same earth colours as found in pottery. The colours of these cloths are a deep lustrous red, black, indigo, off white or dusty pink and purplish brown. The design in black is applied on the dull red background. At times two tones of the same colour are used to produce the design. Where the background is left white, it is never a dead white but a dull pinkish tone — the design being stamped in terracotta red or dull brown. Here again we can trace a strong resemblance to the Quetta wares with their white backgrounds and designs in purplish brown.

It is, however, in the treatment of decorative motifs and the arrangement of these motifs on the fabric that the resemblance between printed cloths and prehistoric pottery ceases to be a matter of conjecture. In both pottery and resist-dyed cloths we find a total absence of the naturalised floral forms strewn across the cloth. Decorative motifs are geometric and highly stylized. Rings, dots and zig-zag ornaments are commonly used. Leaves, particularly the peepul leaf, is a motif common both to pottery and resist cloths. The lotus flower, birds and the human form are occasionally found. Designs are arranged in panels both horizontally and vertically, these panels being outlined with multiple lines or sometimes with checks.

A deeper study into the treatment of design and decorative motifs found in resist-dyed cloths is necessary before we can arrive at any definite conclusions—it is not however possible to dismiss the resemblances as insignificant. Resist cloth dyeing in the earth tradition survives today in innumerable villages in Gujerat, Kathiawar, Rajputana and Central India. The most famous centres are Rajpur Desa near Palanpur, Baroda and Ahmedabad in Gujerat, Bagasara, Surendranagar, Cutch in Kathiawar and Sanganer, Jodhpur, Udaipur and Jaisalmer in Rajputana. I give below a description of the printing processes commonly used today in Gujerat and Kathiawar.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Fragment of painted pottery from Harappa.



A madder dyed village cloth from the borders of Bikaner and Jaisalamer. The background is a dull pinkish white and the design is reproduced in dark red and black.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

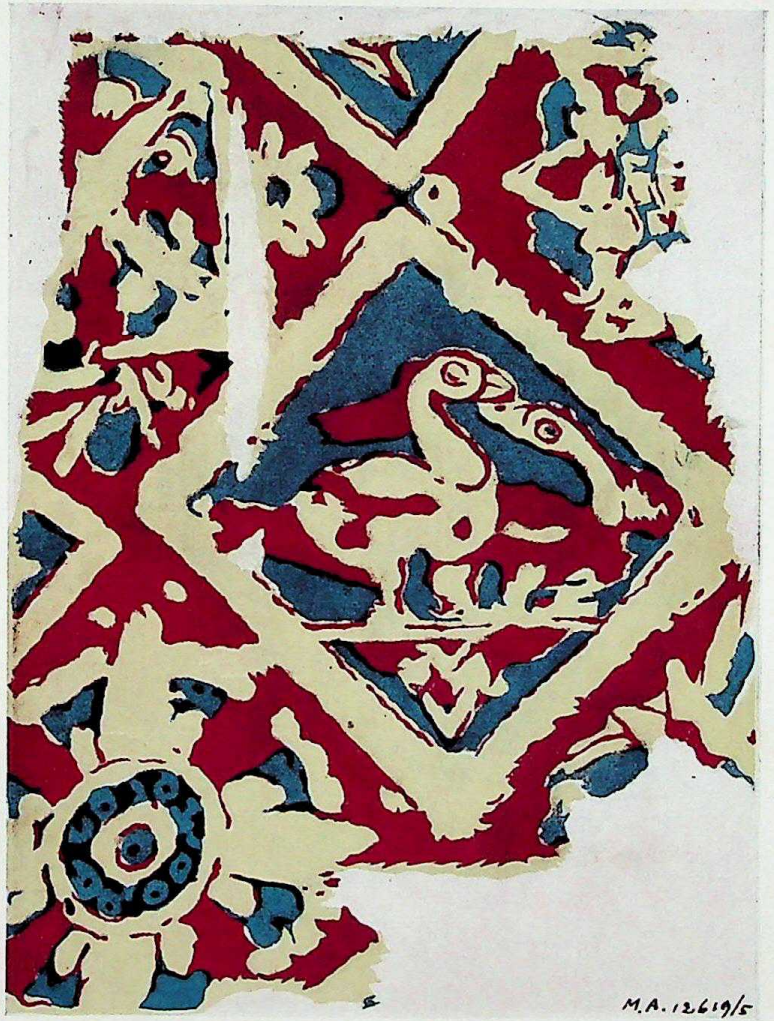
The Mordant-Madder or Alizirine Process

Preparation of Cloth.

Take camel dung equal to one fourth the weight of the grey cloth and mix it with water. Dip grey cloth in mixture and leave for twelve hours. Then remove the cloth and wash it in running water. Then take camel dung equal to one twentieth part of weight of the cloth and mix it with the same quantity of salt found round the Sansar Lake in Rajasthan. Add water and boil the cloth in this mixture, seeing that the steam does not escape from the mouth of the vessel. To ensure this, a piece of cloth is twisted round the opening of the vessel while another piece of cloth is wrapped round the cloth which is to be boiled. The process is known as ''Khambh Bafwa''. When the mixture rises through the cloth to the mouth of the vessel, the boiling process is said to be over. The cloth is then taken out and washed in running water. Now the oiling process commences. Take castor oil at the rate of four tolas per one lb. of cloth, take the same quantity of washing soda, mix the washing soda in water and add castor oil, pouring it slowly into the mixture. Take one-fourth part of the mixture and dip the cloth in it. Dry the cloth in the sun. Before the cloth is completely dry it is washed in salt water and mixture of castor oil and washing soda; it is then washed in running water and again dried in the sun. This process is known as ''Bola''. The washing process is repeated ten or twelve times till the salt is removed from the cloth. The cloth is slowly given more and more sun after each wash. Care has to be taken to see that the cloth does not get too hot. The greater the number of washes the brighter the cloth emerges and the faster the colour of the dye. After the washes are over the cloth is left in the sun from eight to twelve hours. The process is now over. Next the dyeing process commences.

Take five tolas of Harda (Myrabolum) to every lb. of cloth. Add the same quantity of Baheda, mix in water and give the cloth a light wash in this mixture. Dry the cloth in the sun. Print the design on the cloth in black outline using the following solution: Take one maund pieces of rusted iron shavings, add one maund of water and one lb. of ''gud'' (jaggery); mix the solution in an earthern pot. Leave the pot with its mouth open in the sun for five days in summer and ten days in winter. Take one lb. of flour of ''Kachuka'' and add to it 40 lbs. of mixture of iron shavings and jaggery. Boil the solution till the liquid stops bubbling and the liquid has thickened. It is now ready

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh



Fragment of resist dyed textile from Fostat : Egypt.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

for use. After the outlines of the block have been stamped with this liquid the interior of the design is stamped with a mixture of liquid alum and Kachuka flour. The cloth is then washed in running water. When the washing process is over the cloth is dipped in Madder dye. The red colour appears only on those parts that have been treated with alum, the remaining area retains its natural colour. If the whole cloth is to be dyed red, alum solution is not applied by block but the whole cloth is dipped in an alum solution and subsequently immersed in the Madder or Alizirine dye. The colour which emerges is a deep Madder red. If darker tones are needed a deeper solution of alum is prepared. After colouring the cloth is starched with gum, the proportion of starching depending on the buyer.

The Indigo Process:

The cloth to be dyed is washed in running water. When it is dry it is block-printed with a clay paste, prepared as follows: Take one maund of stickly clay, ½ lb. "Dali", 1 lb. "Tharua" gum, 1 lb. liquid "gud" (jaggery). Mix with proportionate quantity of water. This is known as the "Dabu" process. After the process is over, the cloth is ready for the dyer. It is immersed in the following mixture: Fill an earthern pot with 5 maunds water, add 4 lbs. "Saji Kharo" or Papad Khar (a vegetable product made in Rajasthan), 4 lbs. Kali Chuna (calcium made from stone)—1 lb. indigo and ½ lb. hydro-sulphite of soda. This is known as a "Bhat". When it is ready add indigo and hydro-sulphite. Dip the cloth in this solution and keep it till the required depth of colour is reached. The cloth is then dried in the sun and the clay removed from the surface of the cloth. The portion which has been covered with the clay paste retains its original colour as the dye cannot penetrate through the clay resist. The dye however seeps through into the veins of the cloth giving the edges of the design a broken effect rather like the "Batik" effects of Indonesia.

Innumerable variations of these two ancient processes exist in Gujerat, Kathiawar and Rajputana, and South India but the basic principles are the same.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Temple cloth from Ahmedabad. These cloths are produced in the mordant technique by Harijan families. The main theme is the great mother, Goddess Durga, riding triumphantly on a buffalo. Surrounding her are illustrations from the cycle of Puranic legends.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

One of the richest expressions of the indigenous earth tradition was the production of temple cloths used as screens on wooden "Raths", in temple processions. I have already mentioned some of the great centres in South India that produced these cloths right up to the end of the 19th century. The only craftsmen today who produce religious cloths are some Vaghri Harijan families in Ahmedabad. These cloths are prepared in the old Madder processes, and depict the Goddess Durga riding the buffalo and surrounded by various illustrations from the cycle of Puranic legends. These Gujerat temple cloths are not so elaborate as the South Indian specimens. The only colours in use are red and black. Blocks are used to stamp the design on to the cloth. The effect though crude displays that rare vitality that is evident in most traditional forms.

The mosaic or inlay tradition is synonymous with the emergence of the great craft schools that sprang up round the Moghul Emperors and their courts. The Moghul Emperors were patrons of exquisite sophistication and the painted fabrics that were created under their patronage bear the stamp of this elegance and preciousness. A study of Moghul miniature painting reveals the extraordinary beauty of some of the painted fabrics worn by the King and his courtiers. A favourite form appears to have been the sashes worn over the main garment. The end pieces of these were painted with exquisite floral nosegays or the Tree of Life. Gold was nearly always used to outline the pattern. Some specimens of these sashes have survived. They were produced on the finest Dacca muslins and the effect is unsurpassed in the history of printed textiles.

The inspiration behind the printed cloths of this period is the same inspiration that produced the floral decorative motifs in Moghul miniature painting, the enamel work and the exquisite precious stone inlay work in marble so often used in the architecture of the Moghuls. If the basic effects of the earth cloths was of relief in red sandstone, these court fabrics were reproductions in cloth of the effect of marble inlay. Floral designs predominate and bear evidence of the great love the Moghuls had for gardens and flowers. The treatment is formalized but the "*buties*" or floral nosegays are strewn over the whole length of the cloth. There is a marked absence of geometric designs and the use of panelling to break up the design. The floral motifs are shaded in various tones of the same-colour to produce a deep rich effect. The colours mainly used are various tones of Madder red, indigo, green and yellow.

CC-0. Chandigarh Digital Preservation Foundation, Chandigarh.

"Vasamalai", that which is hung on walls. Temple cloth from Sikkayakan Peth, Kumbakonam Taluka, Tanjore.

Shiva & Parvathi riding the bull, Nandi. Late 19th century.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

The Tree of Life was often used as a decorative motif to ornament the wall hangings that were used in palaces and in the royal tents. In the Masulipatam cloths the tree trunk bases and flowers were filled in with a fern like tracery. The cone in various forms was an ornament generally used to decorate these cloths.

The most famous centres for the mosaic or inlay tradition right up to the end of the 19th century were Masulipatam, Kalahasti, Salem, Negapattam, Kumbakonam, Pallakolu in South India and Sanganer in Jaipur. The cloths of the Southern centres were known as ''Kalamkaris''. The processes used in the production of these cloths were basically similar to the ones already described. The indigo and the madder process were both used to produce Kalamkari cloths. Blocks however were never used to impress the designs or fill in the colours. The various mordants, resists and dyes were applied by a Kalam or brush. Bee-wax was used as a resist medium. A detailed description of the manufacturing process is given by Hadaway in his book on Madras Printed Cloths[3] and by C. P. Baker in his ''Calico Painting & Printing in the East Indies in the 17th and 18th Centuries.'' (London 1927).

From the middle of the nineteenth century, the demand for painted fabrics diminished. The reason for this is not difficult to find, rooted as it is in the socio-economic background of this country. The disappearance of the indigenous market was the result of a growing desire on the part of our leisured classes to adopt a hybrid culture pattern based on an imitation of the Western way of life. The new rich that were coming into existence as a result of the emergence of new economic relationships, not only demanded designs based on the cheapest imitation of Western art forms but soon recognized the possibility of reproducing hand craftsmanship by mechanical means. With this a rapidly diminishing export market for painted fabrics dealt a severe blow to the printing industry.

Trade in printed cottons has been known to have existed from the earliest times. Five thousand years ago trade in cotton cloth known as Sindu existed between Harappa, Baluchistan and Babylon. Right from the beginning of this era land and sea routes carried cotton printed fabrics to Egypt, Arabia, Turkistan, China, Siam and Java. The trade was of such magnitude that whole villages sprang up solely concerned with producing cloths adapted to suit the demands of foreign markets. A village

3. Cotton painting and printing in the Madras Presidency. W. S. Hadaway.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

A Multan Sari, Modern Kalamkari from Masulipatam.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

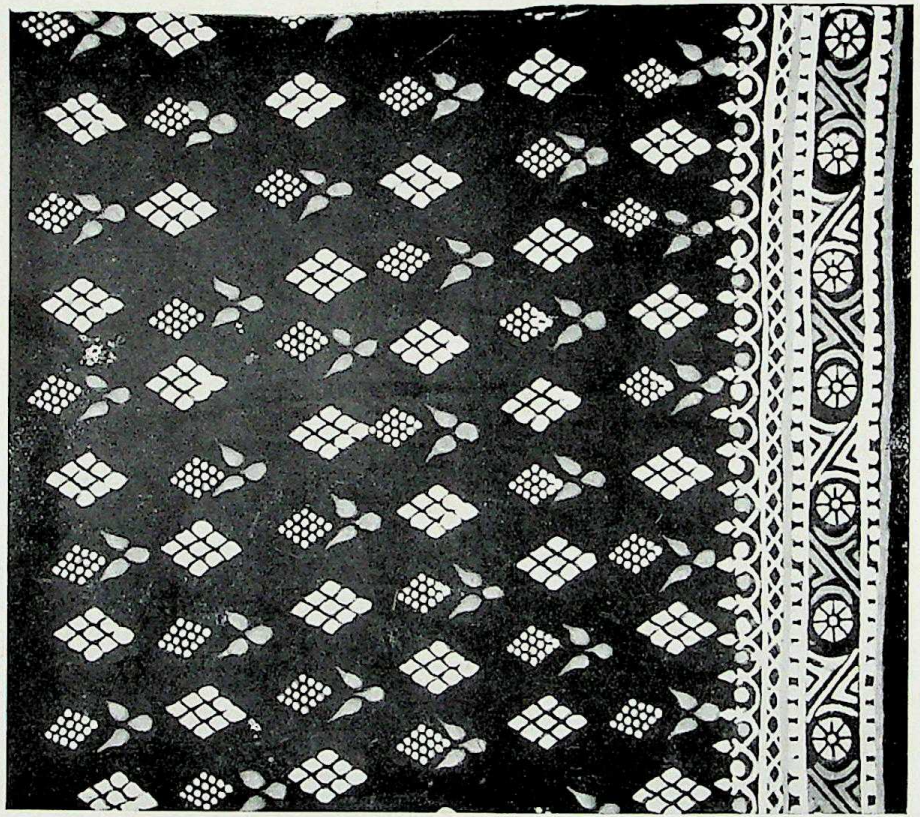
known as Pithapur near Ahmedabad still exists, composed solely of block makers producing blocks for the manufacture of "Soudagir" or Trade cloths. Till recently heavily glazed resist and madder dyed "Soudagir" cloths produced in Ahmedabad were being exported to Siam. In Masulipatam saris are produced today which are known as Multan Saris. In Tanda in Fyzabad U.P. special printed cloths are being produced for the Nepal market.

From the fifteenth century Portugese merchants were importing printed fabrics into Europe. These came to be known as Pintados, Chints, Chites, Chidneys. By the seventeenth century these cotton prints had become extremely fashionable in England and France. In fact, so great was the trade in printed fabrics that it threatened the woollen industry in England. By the beginning of the eighteenth century laws were passed in England prohibiting trade in Indian cottons and soon after, the wearing of printed cottons was prohibited by law. With the development of the cotton industry in England cheap cotton prints produced in mills and imitating the designs of the old Indian resist dyed fabrics were introduced into India. With the result that the centres that produced the finer resist dyed cloths had to turn their attention to the manufacture of cheap hand-blocked goods to compete with the Manchester printed cloths. Many of the original centres of printing disappeared and new centres emerged producing cheap block printed fabrics often in imitation of the old Kalamkari cloths. The most important centre to emerge in the last hundred years to satisfy the growing demand for cheap block printed cottons has been Farrukhabad in Uttar Pradesh. Farrukhabad is today the largest centre exporting "Indian Prints" to Europe and America. Although the Farrukhabad "chipa" is a good craftsman, capable of producing very fine printing, the demand for cheaper and cheaper prints has inevitably lead to a deterioration in the quality of his work. It is true that the State Government imposes quality stampings on the Farrukhabad printed cloths to guarantee fastness of colour. It has also fixed a minimum price of Rs. 1-2-0 a square yard as the price of the finished Farrukhabad cloth. But these very cloths are being sold as cheap as 15 as. a square yard. When we consider that the value of the cloth must be a minimum of 11 as. and that the 15 as. covers the profit to the middle man we can well imagine the dreadfully inadequate sum that is left to the printer.

In recent years there has been an increasing interest in India for better designs and finer craftsmanship. Various ancient centres

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

A block printed cloth from Manchester; late 19th century. This is a specimen of the cloths produced in Manchester for Export, imitating Indian village cloth.



A Roghan printed "Ghagra" shirt cloth from Baroda. The background is dark maroon and the design is in yellow, white and orange.

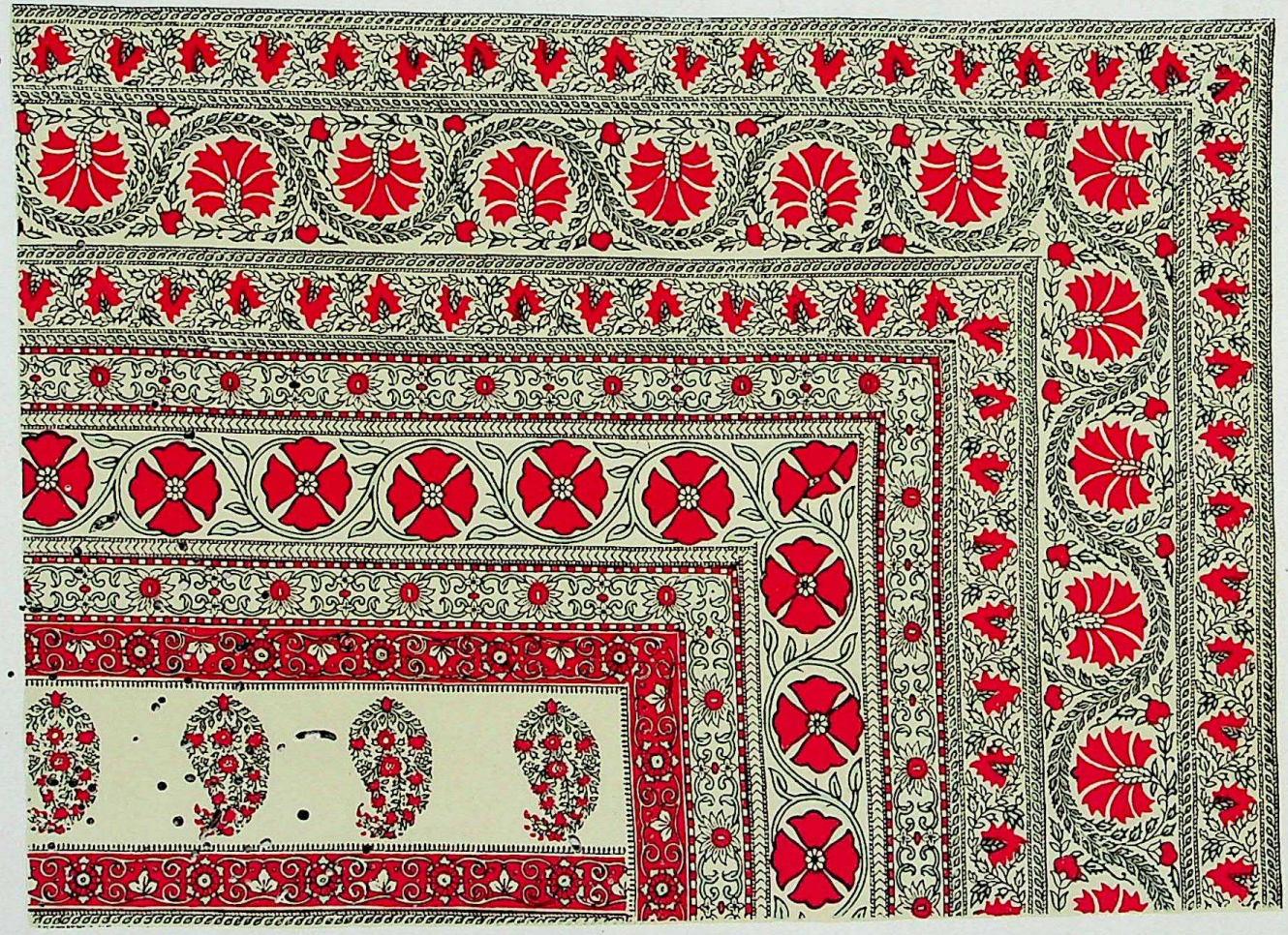
CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

of printing have been encouraged to produce finer examples of their craft, and it has been found that fine craftsmanship can find a local market. Sales and purchase agencies though developing are yet inadequate.

There has been a growing tendency in recent years for the introduction of printing machinery in many cotton mills. This must lead to a severe crisis in the "chipa" industry. Next to handlooms, the "chipa" industry is the cottage industry absorbing the largest number of workers. From many areas there are reports of growing unemployment among the "chipas". The flooding of the rural markets with cheap mill printed cotton cloths, imitating even the traditional designs worn by the women in interior areas must seriously affect the "chipa" craftsman. What then is the answer? The problem has no easy solution. For every argument in favour of curtailing the activities of the machine, there is an equally powerful argument for the introduction of the machine. The problem is of the craftsman and his individual creative processes against the machine and its grinding efficiency—What is necessary? The answer will always be hypothetical. The forces that are being generated by the conflicts inherent in such a position have already predetermined the future shape of the economic life of this country. It is no longer a question of bolstering handicrafts by subsidies and encouragement. If crafts and the uniqueness inherent in the craft tradition has to survive it can only be done by the recognition in the individual consumer of the richness of the contribution of the craftsman to the economic and social life of the community. This implies a rebellion against those forces that seek to impose mass patterns of culture and thought inherent in a highly mechanised economy. The problem is one of sensitivity, awareness and intelligence.

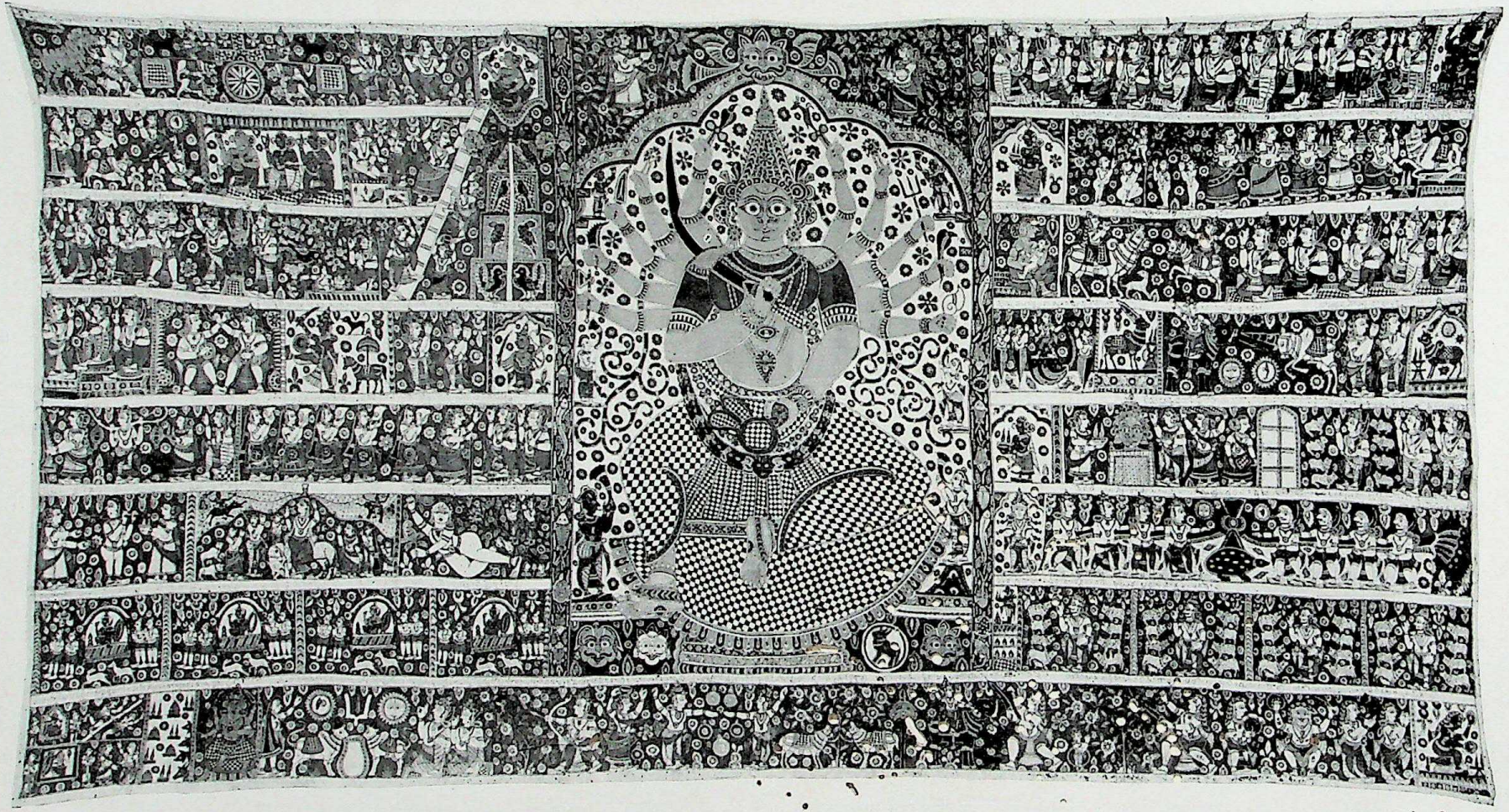
PUPUL JAYAKAR

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh



Block print from Farokhabad. After an old specimen of Farokhabad printed cloth at the Victoria & Albert Museum.

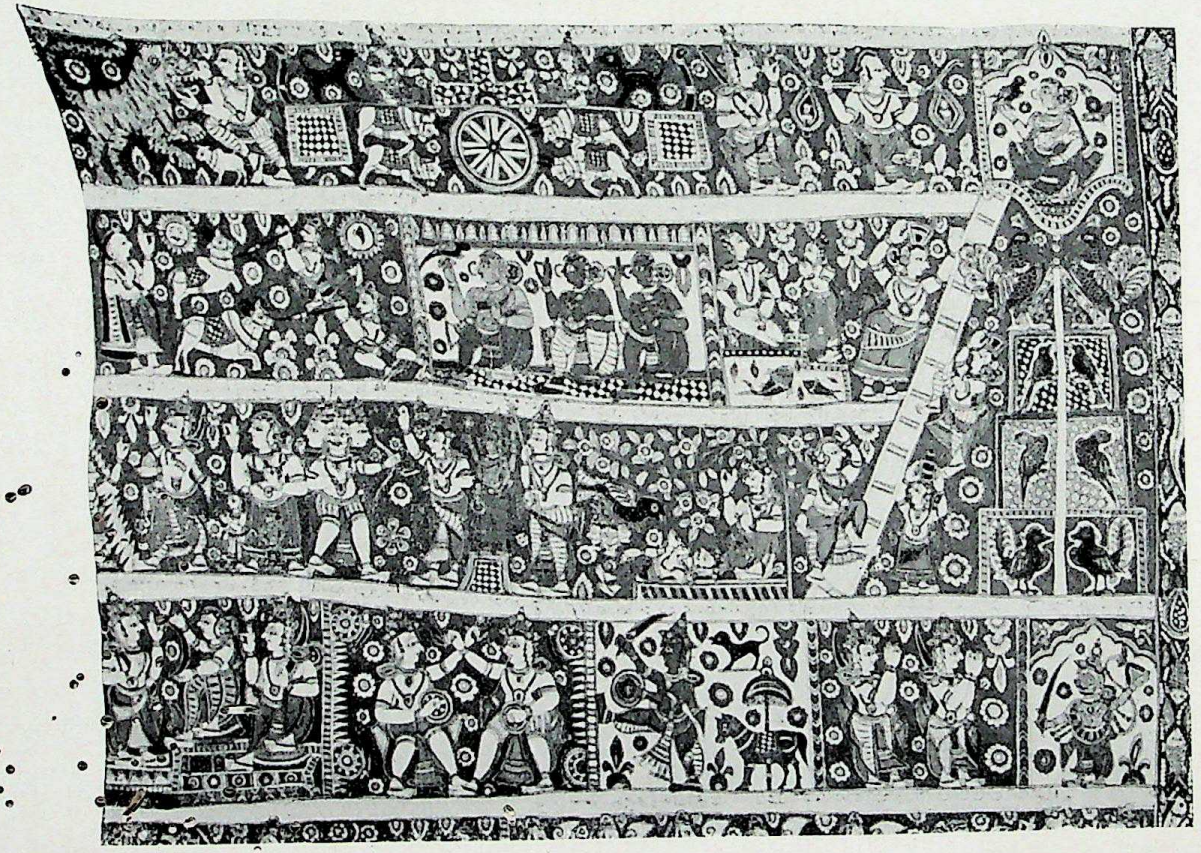
CC-0. Agamnigam Digital Presevation Foundation, Chandigarh



An exquisite old painted temple cloth from South India. In the centre is the ten-armed mother Goddess Durga, holding all the symbols of her divine consort. The illustrations are from various legends found in the cycle of puranic legends.

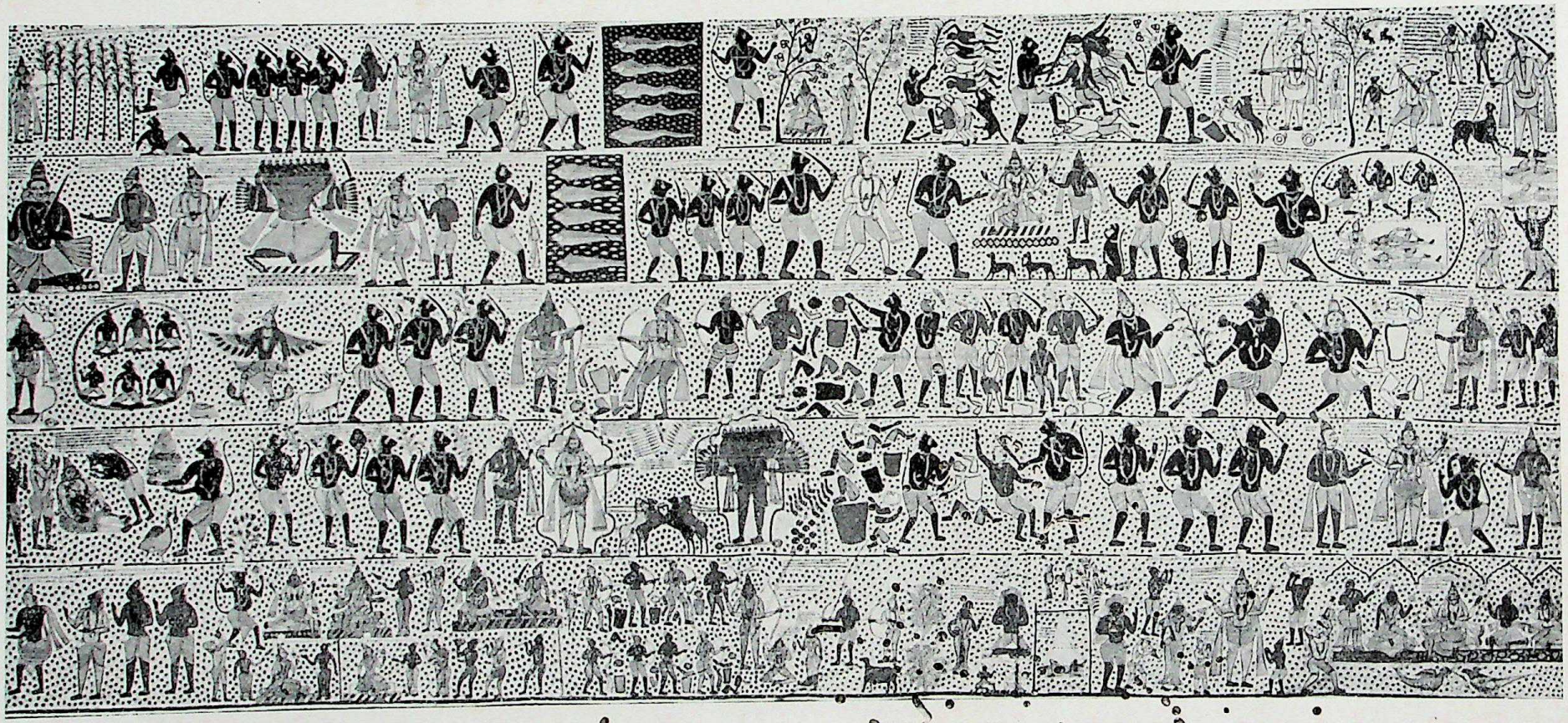
(Courtesy: Victoria & Albert Museum)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh



Section of an old painted temple cloth from South India.

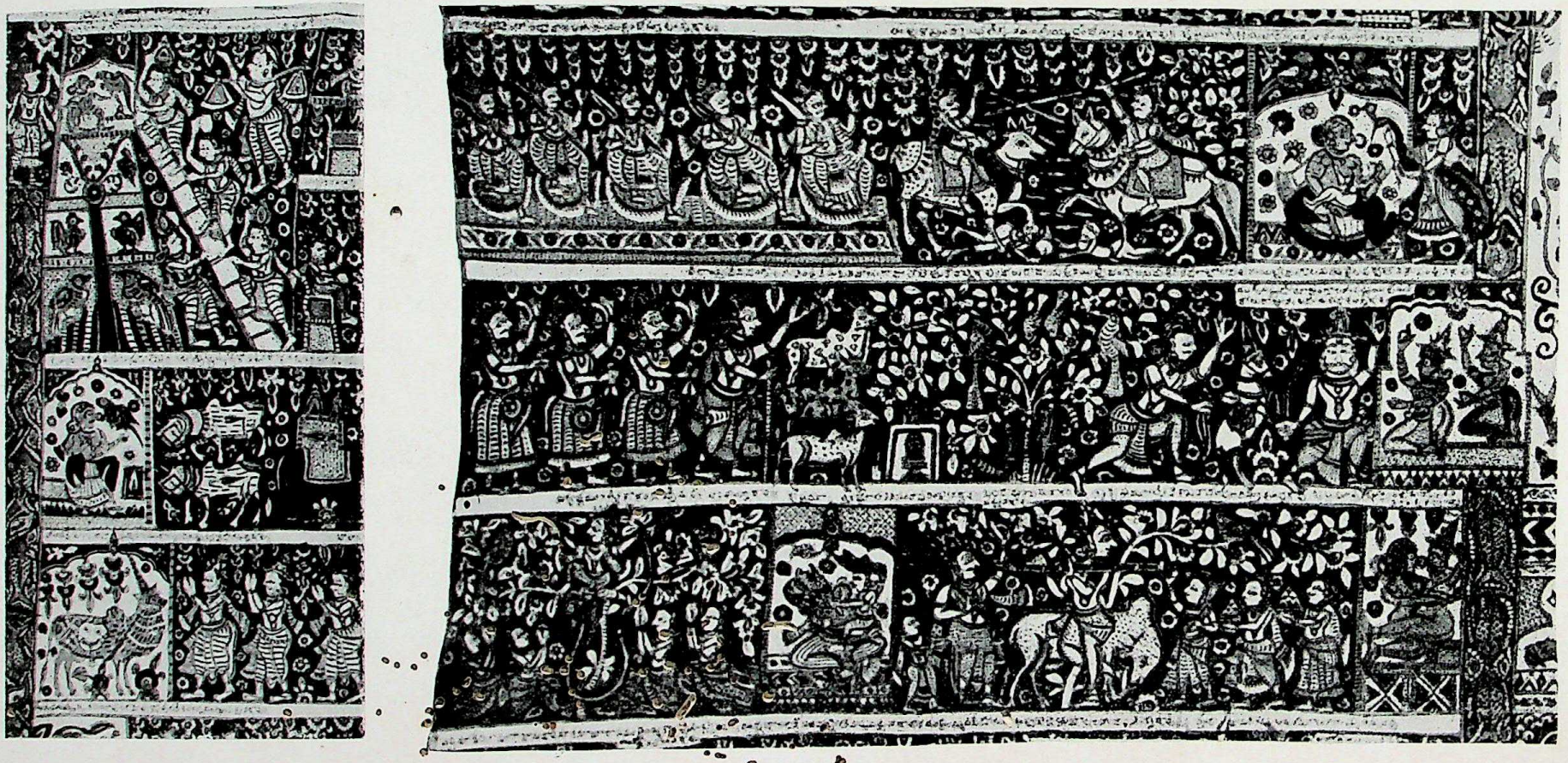
CC-0. Agamnigam Digital Presevation Foundation, Chandigarh



An old South India temple cloth. It illustrates episodes from the "Ramayana". In the central panel you see the battle of Rama and Ravana. An interesting feature is the spotted background against which the figures are drawn. Origin unknown.

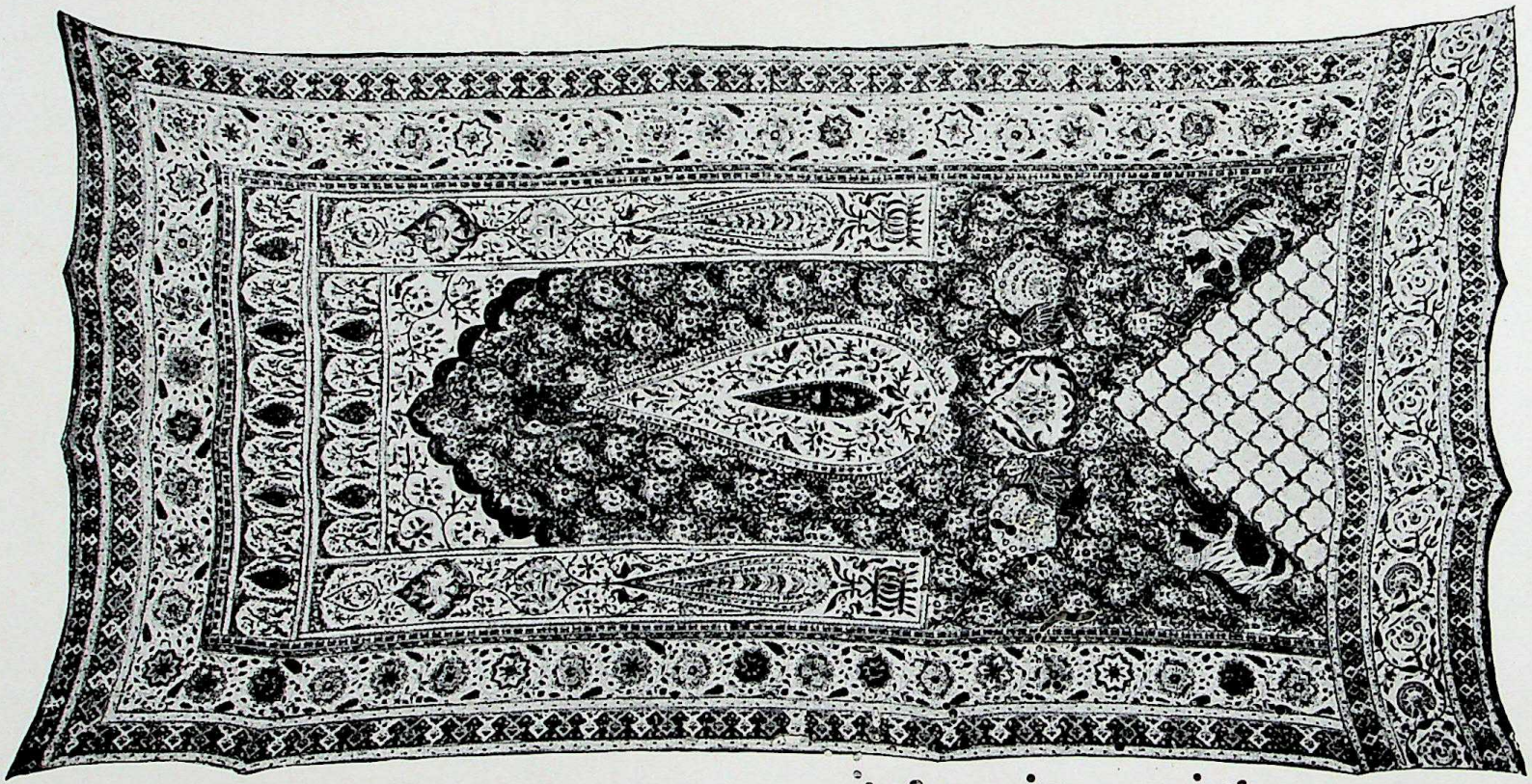
(Courtesy: Victoria & Albert Museum)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh



Sections of an old printed temple cloth from South India. Origin unknown. (*Courtsey: Victoria & Albert Museum*)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

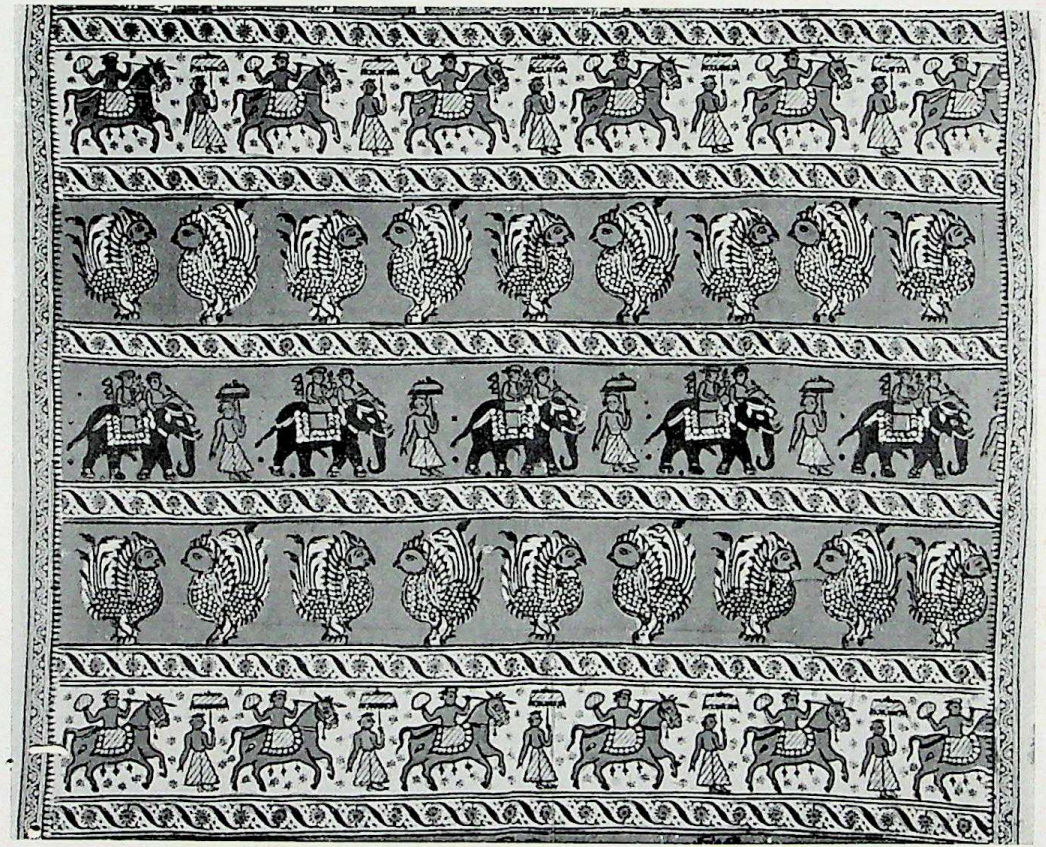


A modern Kalamkari cloth from Masulipatam.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

An o'd Moghul wall hanging. The design is the Tree of Life. The colours used are a rich madder red, indigo and black.

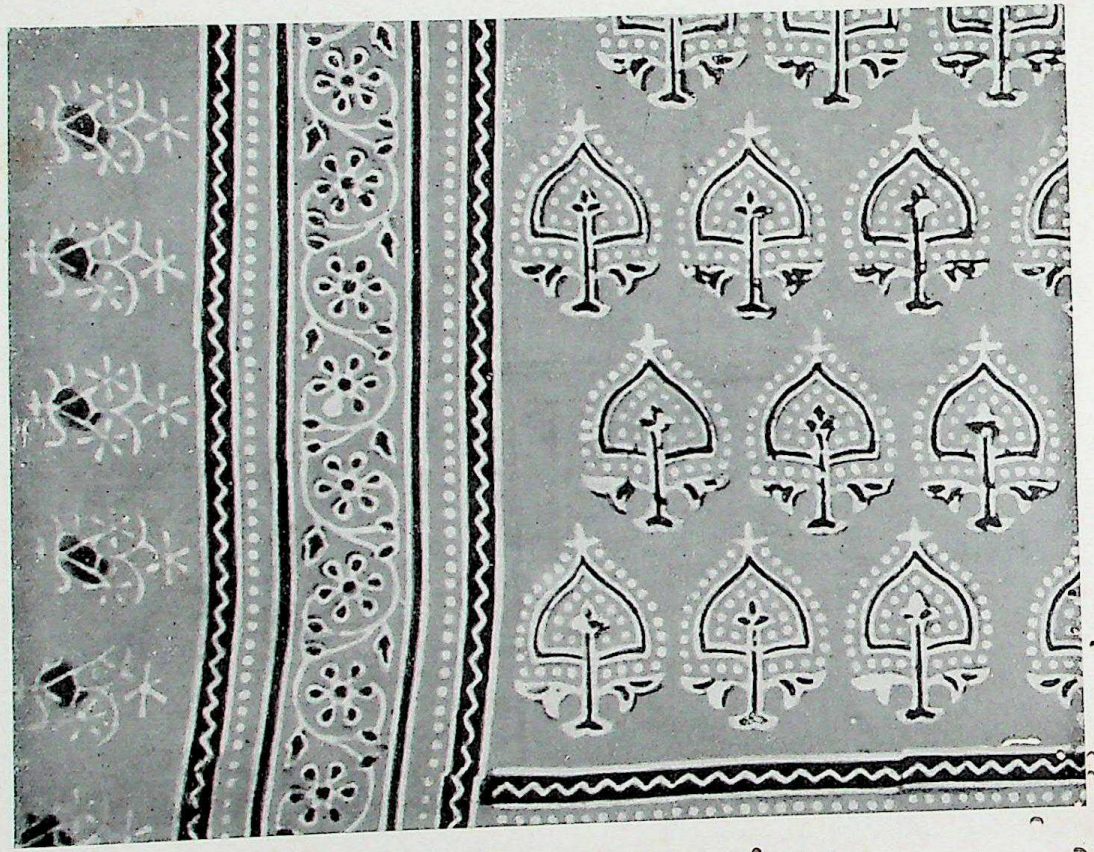
(*Courtesy: Archaeological Department of India*)



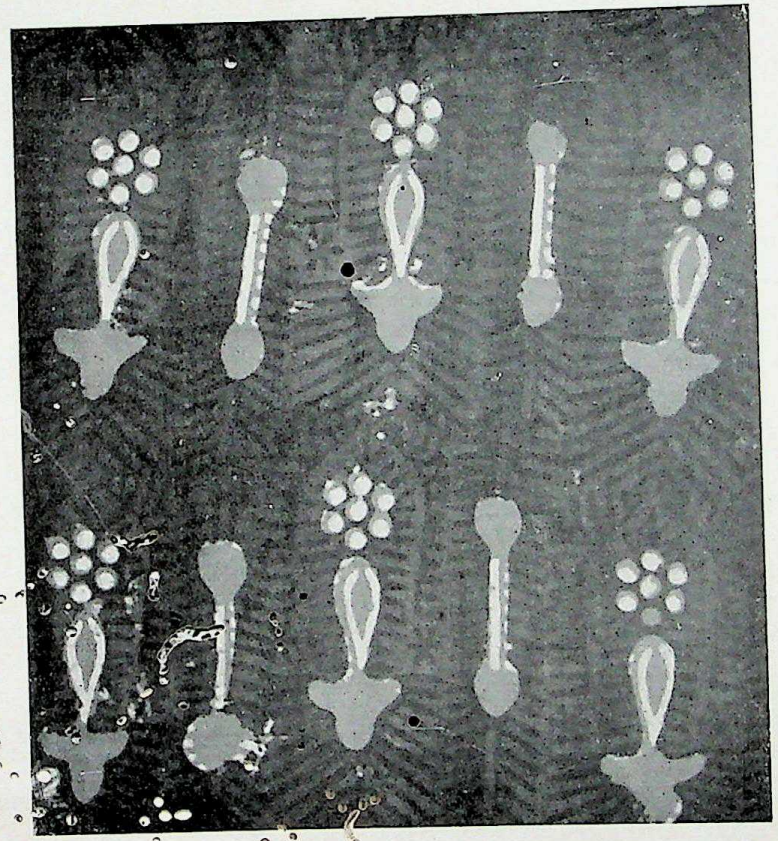
An old block printed cloth from South India.

(*Courtesy: Victoria & Albert Museum*)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh



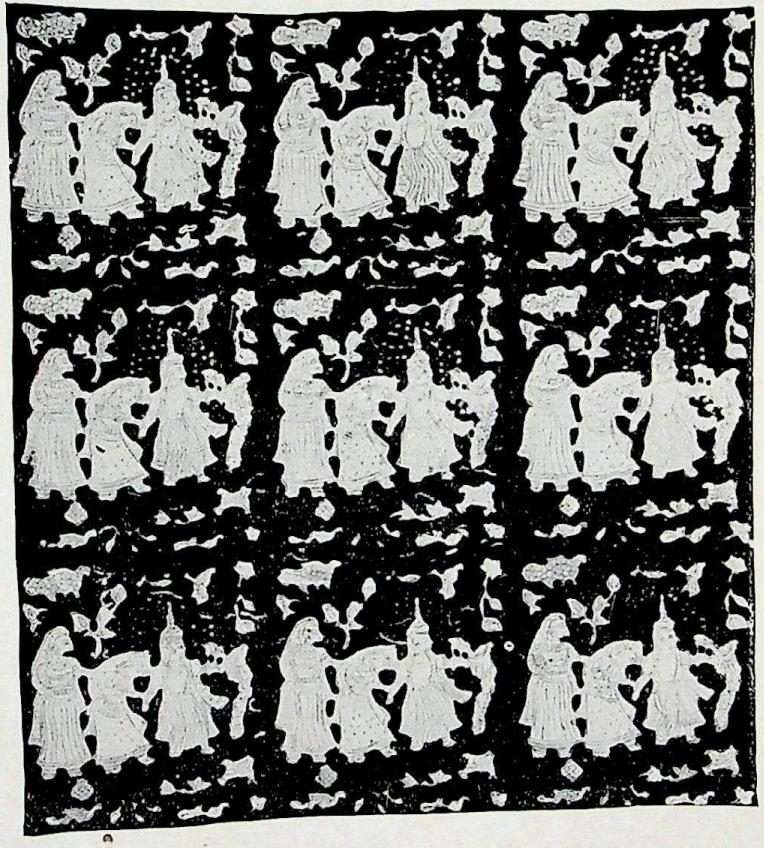
Madder dyed village cloth from Rajpur Desa, Gujerat.



Resist dyed village cloth from Rajpur Desa, Gujerat. The design is suggestive of the clay oil lamps lit during the festival of Divali. The main colours are indigo, dark red and white.

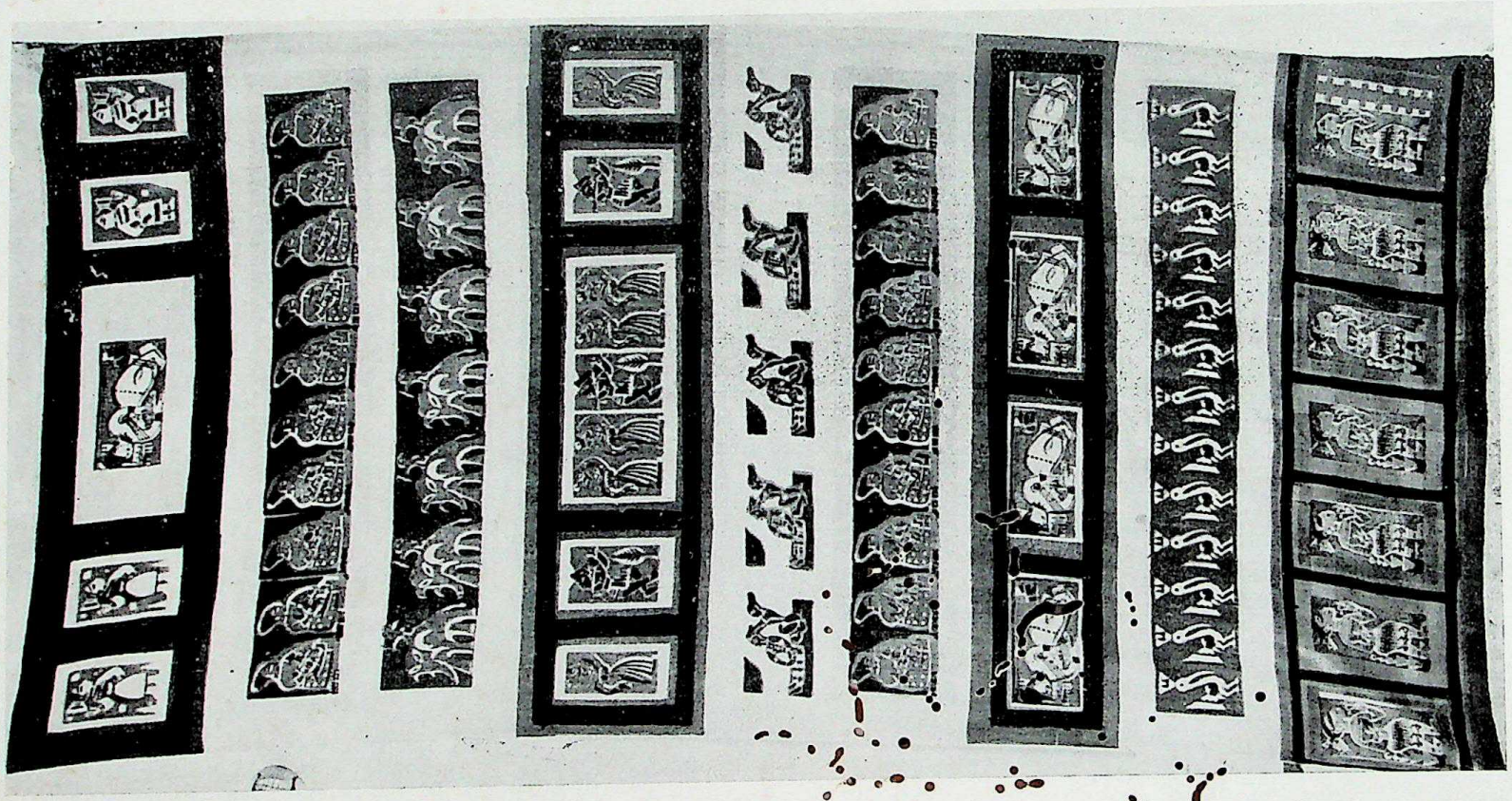
CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Contemporary block-printed cotton cloths from Bombay.



Contemporary block-printed cotton cloths from Bombay.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh



Block-printed cloth from Bengal. The design is based on the rich local folk tradition.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

APPENDIX

Important Printing Centres in existence to-day

Bombay State

Bombay	Block—Screen—Discharge Printing.
Baroda	Roghan—Block—Alizirine—Printing.
Kaira	Alizirine Printing.
Ahmedabad	Indigo—Alizirine—Block—Roghan. Tinsel Printing.
Rajapur—Desa	,,
Vasna	,,

Saurashtra

Jamnagar	,,
Bagsara (Bhavnagar)... ...	,,
Surendranagar (Wadhwan)...	Roghan Printing.
Rajkot	Indigo Alizirine Printing.
Jetpur	,, ,,

Rajputana

Sanganer—Jaipur	,, ,,
Jodhpur	,, ,,
Bikaner	,, ,,
Udaipur	,, ,,
Jaisalmir	,, ,,

Uttar Pradesh

Mathura	Block Printing.
Agra	,, ,,
Pilkhua	,, ,,
Farrukhabad	,, ,,
Lucknow	,, ,,
Benaras	Block and Alizirine Printing.
Mirzapur	Alizirine Printing.
Tanda (Fyzabad)	Indigo and Alizirine Printing.

South India

Erode	Block Printing
Tirrupur	,, ,,
Mangalore	,, ,,
Masulipatam	Kalamkari—Alizirine & Indigo.

East Coast

Vizianagaram	Block Printing.
Tuni	,, ,,
Chirala	,, ,,
Gopallen	,, ,,
Vijayawada	,, ,,

Delhi — Block Printing.

Recent information has been received by me that a family of craftsmen producing religious cloths still survives in Kumbakonam, Tanjore District. This family has continued to produce traditional cloths under the patronage of a famous local "*Math.*"

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Printed by S. Ramu at the Commercial Printing Press,
34-38, Bank Street, Fort, Bombay 1.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh